

**UNITED STATES DISTRICT COURT  
DISTRICT OF DELAWARE**

ALTO DYNAMICS, LLC,

Plaintiff,

v.

HOUZZ, INC.

Defendant.

CIVIL ACTION NO. \_\_\_\_\_

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Alto Dynamics, LLC (“Alto Dynamics” or “Plaintiff”) files this complaint against Defendant Houzz, Inc. (“Houzz” or “Defendant”) alleging, based on its own knowledge as to itself and its own actions, and based on information and belief as to all other matters, as follows:

**NATURE OF THE ACTION**

1. This is a patent infringement action to stop Defendant’s infringement of the following United States Patents (collectively, the “Asserted Patents”), copies of which are attached hereto as **Exhibit A, Exhibit B, Exhibit C, Exhibit D, Exhibit E, Exhibit F, Exhibit G, Exhibit H, Exhibit I, and Exhibit J**, respectively:

	<b>U.S. Patent No.</b>	<b>Title</b>
A.	8,051,098	Systems And Methods For State-Less Authentication
B.	RE46,513	Systems And Methods For State-Less Authentication
C.	7,657,531	Systems And Methods For State-Less Authentication
D.	7,392,160	System And Method For Monitoring Usage Patterns
E.	7,152,018	System And Method For Monitoring Usage Patterns
F.	6,604,100	Method For Converting Relational Data Into A Structured Document
G.	6,691,103	Method For Searching A Database, Search Engine System For Searching A Database, And Method Of Providing A Key Table For Use By A Search Engine For A Database
H.	6,662,190	Learning Automatic Data Extraction System
I.	6,757,662	Method And System For Display Advertisement Qualification And Notification

	<b>U.S. Patent No.</b>	<b>Title</b>
J.	6,311,194	System And Method For Creating A Semantic Web And Its Applications In Browsing, Searching, Profiling, Personalization And Advertising

2. Alto Dynamics seeks injunctive relief and monetary damages.

### **PARTIES**

3. Alto Dynamics, LLC is a limited liability company organized under the laws of the State of Georgia, with its principal place of business at 4275 Peachtree Corners Circle, Suite 230, Peachtree Corners, Georgia 30092 (Gwinnett County).

4. Houzz, Inc. is a corporation organized under the laws of Delaware with its corporate headquarters located at 285 Hamilton Avenue, Palo Alto, California 94301.

5. Houzz may be served through its registered agent for service, Corporation Service Company, Inc., which is located at 251 Little Falls Drive, Wilmington, Delaware 19808.

### **JURISDICTION AND VENUE**

6. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

7. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1 et seq., including 35 U.S.C. §§ 271, 281, 283, 284, and 285. This Court has subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).

8. The Court has personal jurisdiction over Houzz because: Defendant has minimum contacts within the State of Delaware and in this District; Defendant has purposefully availed itself of the privileges of conducting business in the State of Delaware and in this District; Defendant has sought protection and benefit from the laws of the State of Delaware and is incorporated there; Defendant regularly conducts business within the State of Delaware and within this District, and

Plaintiff's causes of action arise directly from Defendant's business contacts and other activities in the State of Delaware and in this District.

9. More specifically, Houzz directly and/or through its intermediaries, ships, distributes, makes, uses, imports, offers for sale, sells, and/or advertises its products and services in the United States, the State of Delaware, and in this District.

10. Based upon public information, Houzz solicits customers in the State of Delaware and in this District and has many paying customers who are residents of the State of Delaware and this District and who use its products in the State of Delaware and in this District. Houzz is also incorporated in the State of Delaware and in this District.

11. Venue is proper pursuant to 28 U.S.C. §1400(b) because Houzz resides in the District of Delaware because of its formation under the laws of Delaware.

12. Venue is proper pursuant to 28 U.S.C. § 1391(b) and (c) because Houzz resides in the District of Delaware because of its formation under the laws of Delaware, which subjects it to the personal jurisdiction of this Court.

### **THE ACCUSED INSTRUMENTALITIES**

13. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

14. Based upon public information, Houzz owns, operates, advertises, and/or controls the website <https://www.houzz.com> and associated hardware, software, and functionality that among other features, allows users to view, search, save, and purchase items on Defendant's online sales platform, tracks user activities and preferences (*e.g.*, using cookies), provides website and user authentication (*e.g.*, using user login processes and secured sessions), employs internal company analytics that it offers to its employees and staff, delivers customized advertisements and electronic

product placements, provides a browsing history and the ability to query and re-select items, and allows for the processing of resumes for job applications, and with respect to at least some of the foregoing features, provides them through its mobile apps available through the Apple App Store, Amazon, and Google Play (the “Accused Instrumentalities”).<sup>1</sup>

**COUNT I: INFRINGEMENT OF U.S. PATENT NO. 8,051,098**

15. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

16. The USPTO duly issued U.S. Patent No. 8,051,098 (the “’098 patent”) on November 1, 2011, after full and fair examination of Application No. 12/691,547, which was filed on January 21, 2010. *See Ex. A*, at A-1. A Certificate of Correction was issued on June 12, 2012. *See id.*, at C-20.

17. The ’098 patent is entitled “Systems And Methods For State-Less Authentication.” *See Ex. A*, at A-1.

18. Alto Dynamics owns all substantial rights, interest, and title in and to the ’098 patent, including the sole and exclusive right to prosecute this action and enforce the ’098 patent against infringers, and to collect damages for all relevant times.

19. The claims of the ’098 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods for authenticating users of program objects in distributed computing environments based on negotiated security contexts.

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<sup>1</sup> *See Ex. K* (Houzz - Login); *Ex. L* (Houzz – Privacy Policy); *Ex. M* (Search Experience).

20. The written description of the '098 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '098 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

21. Defendant has infringed one or more claims of the '098 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including, but not limited to, Defendant's employ of secure communication sessions between user computing device and a logon component on its online sales platform.

22. Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '098 patent.

23. For example, the Accused Instrumentalities provide website and user authentication (*e.g.*, using user login processes and secured sessions), including by performing, and allowing users to perform a method for accessing any of a plurality of resources wherein at least some of the resources do not share a common processing platform, comprising the steps of establishing a secure communication session between a user computing device and a logon component, wherein the secure communication session comprises a temporary, interactive information exchange that is set up and then torn down; verifying logon information provided by the user computing device to the logon component using the secure communication session and responsively generating a security context to be employed by the user computing device that is unique to a user of the user

computing device and necessary to access any of the plurality of resources without requiring any follow-on authorization communications between the accessed resource and the logon component.

24. On information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights).

25. Defendant's actions were at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

26. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '098 patent.

27. Plaintiff has been damaged and continues to be damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## **COUNT II: INFRINGEMENT OF U.S. PATENT NO. RE46,513**

28. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

29. The USPTO duly issued U.S. Patent No. RE46,513 (the "'513 patent") on August 15, 2017, after full and fair examination of Application No. 13/369,112, which was filed on February 8, 2012. *See Ex. B*, at B-1. The '513 patent is a reissue of U.S. Patent No. 7,020,645, which was issued on March 28, 2006 after a full and fair examination of Application No. 09/839,551, which was filed on April 19, 2001. *See id.*

30. The '513 patent is entitled "Systems and Methods For State-Less Authentication." *See Ex. B*, at B-1.

31. Alto Dynamics owns all substantial rights, interest, and title in and to the '513 patent, including the sole and exclusive right to prosecute this action and enforce the '513 patent against infringers, and to collect damages for all relevant times.

32. The claims of the '513 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods for authenticating users of program objects in distributed computing environments based on negotiated security contexts.

33. The written description of the '513 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '513 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

34. Defendant has infringed and continue to infringe one or more claims of the '513 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including, but not limited to, Defendant's employ of secure communication sessions between user computing device and a logon component on its online sales platform.

35. Defendant has directly infringed and continues to indirectly infringe, either literally or under the doctrine of equivalents, at least claim 16 of the '513 patent.

36. For example, the Accused Instrumentalities provide website and user authentication (*e.g.*, using user login processes and secured sessions), including by performing, and allowing users to perform, a method of enabling access to resources of a processing system, including the steps of establishing a secure communication session between a user desiring access and a logon component of the processing system, verifying that logon information, provided by the user to the logon component during the secure communication session, matches stored information identifying the user to the processing system, generating a security context from the logon information and authorization information that is necessary for access to the resource, wherein the security context comprises a plaintext header and an encrypted body, and the plaintext header comprises a security context ID, a key handle, and an algorithm identifier and key size, providing the security context to the user, and sending, by the user to the processing system, the security context and a request for access to the resource.

37. Since at least as early as August 23, 2022, Defendant has also indirectly infringed and continue to indirectly infringe the '513 patent by inducing others to directly infringe the '513 patent. Defendant has induced and continue to induce their subsidiaries, partners, affiliates, and end-users, including Defendant's customers and potential customers, to directly infringe, either literally or under the doctrine of equivalents, the '513 patent by using the Accused Instrumentalities. Defendant took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Instrumentalities in a manner that infringes one or more claims of the '513 patent, including, for example, claim 16 of the '513 patent. Such steps by Defendant included, among other things, advising or directing personnel, contractors, or end-users to make or use the Accused Instrumentalities in an infringing manner; advertising and promoting the use of the Accused Instrumentalities in an infringing manner; or



distributing instructions that guide users to use the Accused Instrumentalities in an infringing manner. Defendant is performing these steps, which constitutes induced infringement with the knowledge of the '513 patent and with the knowledge that the induced acts constitute infringement. Defendant is aware that the normal and customary use of the Accused Instrumentalities by others would infringe the '513 patent. Defendant's inducement is ongoing.

38. Since at least as early as August 23, 2022, Defendant has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '513 patent. Defendant has contributed and continues to contribute to the direct infringement of the '513 patent by personnel, contractors, customers, and other end users by encouraging them to use the Accused Instrumentalities as described in one or more claims of the '513 patent. The Accused Instrumentalities have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe one or more claims of the '513 patent, including, for example, claim 16 of the '513 patent. The special features include, for example, the processing system recited in claim 16 having resources that are selectively accessible to users, the resources including processors, program objects, and records. The special features constitute a material part of the invention of one or more of the claims of the '513 patent and are not staple articles of commerce suitable for substantial non-infringing use. Defendant's contributory infringement is ongoing.

39. Defendant has had knowledge of the '513 patent at least as of the date when it was notified of the filing of this action.

40. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing their employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

41. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

42. Since at least as early as August 23, 2022, Defendant's direct and indirect infringement of the '513 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

43. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '513 patent.

44. Plaintiff has been damaged and continues to be damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

45. Alto Dynamics has suffered and continues to suffer irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. Alto Dynamics has and will continue to suffer this harm by virtue of each Defendant's infringement of the '513 patent. Defendant's actions have interfered with and will interfere with Alto Dynamics' ability to license technology. The balance of hardships favors Alto Dynamics' ability to commercialize its own ideas and technology. The public interest in allowing Alto Dynamics to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

### **COUNT III: INFRINGEMENT OF U.S. PATENT NO. 7,657,531**

46. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

47. The USPTO duly issued U.S. Patent No. 7,657,531 (the "'531 patent") on February 2, 2010, after full and fair examination of Application No. 11/325,463, which was filed on January

5, 2006. *See* **Ex. C**, at C-1. A Certificate of Correction was issued on November 13, 2010. *See id.*, at G-20.

48. The '531 patent is entitled "Systems And Methods For State-Less Authentication." *See* **Ex. C**, at C-1.

49. Alto Dynamics owns all substantial rights, interest, and title in and to the '531 patent, including the sole and exclusive right to prosecute this action and enforce the '531 patent against infringers, and to collect damages for all relevant times.

50. The claims of the '531 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods for authenticating users of program objects in distributed computing environments based on negotiated security contexts.

51. The written description of the '531 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '531 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

52. Defendant has infringed one or more claims of the '531 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including, but not limited to, Defendant's employ of secure communication sessions between user computing device and a logon component on its online sales platform.

53. Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '531 patent.

54. For example, the Accused Instrumentalities provide website and user authentication (*e.g.*, using user login processes and secured sessions), including by performing, and allowing users to perform a method of enabling access to a resource of a distributed application server or processing system by a user/client application possessing a valid security-context, comprising the steps of, receiving the security-context and an appended protected security-context renewal request provided by the user to an access authorization component of the application server or processing system, verifying the validity of the security-context and the security-context renewal request, extracting content of both the security-context and the security-context renewal request, comparing current time to an expiration time identifying time of expiration of the security-context, if the expiration time is less than the current time, comparing the security-context renewal request with stored identity and authorization information comprising at least one of a user identifier, an organization identifier, a sub-organization identifier, a key, an authentication certificate, an user location, a user role, and an user position identifying the user to the access authorization component and generating a new symmetric key, and other access and authorization information, generating an updated security-context based on the verifying of the user's identity and authorization and based on the user having requested authority for access to the resource and services; providing the updated security context to the user, and sending the updated security-context and a request for access to the resource and services by the user to the application server or processing system.

55. On information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights).

56. Defendant's actions were at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

57. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '531 patent.

58. Plaintiff has been damaged and continues to be damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **COUNT IV: INFRINGEMENT OF U.S. PATENT NO. 7,392,160**

59. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

60. The USPTO duly issued U.S. Patent No. 7,392,160 (the "'160 patent") on June 24, 2008, after full and fair examination of Application No. 11/557,170, which was filed on November 7, 2006. *See Ex. D*, at D-1.

61. The '160 patent is entitled "System And Method For Monitoring Usage Patterns." *See id.*

62. Alto Dynamics owns all substantial rights, interest, and title in and to the '160 patent, including the sole and exclusive right to prosecute this action and enforce the '160 patent against infringers, and to collect damages for all relevant times.

63. The claims of the '160 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods for monitoring, recording and analysis of user activity.

64. The written description of the '160 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '160 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

65. Defendant has infringed and continue to infringe one or more claims of the '160 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including, but not limited to, Defendant's deployment of cookies through its online sales platform.

66. Defendant has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '160 patent.

67. For example, the Accused Instrumentalities track user activities and preferences (*e.g.*, using cookies), including by performing, and allowing users to perform a method for monitoring user usage patterns of a system, comprising the steps providing at least one state object, the object including a profile representative of user usage, storing the state object at a client location, passing, to a central server, the state object with each subsequent interaction initiation, and receiving, from the central server, the state object along with the response of the central server, wherein the profile

is modified to reflect the interaction between the client location and the central server, and wherein the central server audits the state object/profile passed to it, and performs analysis on the audited profile in order to direct services and/or information suited to the profile to the client location.

68. Since at least as early as August 23, 2022, Defendant has also indirectly infringed and continues to indirectly infringe the '160 patent by inducing others to directly infringe the '160 patent. Defendant has induced and continue to induce their subsidiaries, partners, affiliates, and end-users, including Defendant's customers and potential customers, to directly infringe, either literally or under the doctrine of equivalents, the '160 patent by using the Accused Instrumentalities. Defendant took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Instrumentalities in a manner that infringes one or more claims of the '160 patent, including, for example, claim 1 of the '160 patent. Such steps by Defendant included, among other things, advising or directing personnel, contractors, or end-users to make or use the Accused Instrumentalities in an infringing manner; advertising and promoting the use of the Accused Instrumentalities in an infringing manner; or distributing instructions that guide users to use the Accused Instrumentalities in an infringing manner. Defendant is performing these steps, which constitutes induced infringement with the knowledge of the '160 patent and with the knowledge that the induced acts constitute infringement. Defendant is aware that the normal and customary use of the Accused Instrumentalities by others would infringe the '160 patent. Defendant's inducement is ongoing.

69. Since at least as early as August 23, 2022, Defendant has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '160 patent. Defendant has contributed and continues to contribute to the direct infringement of the '160 patent by personnel, contractors, customers, and other end users by encouraging them to use the Accused

Instrumentalities to perform the steps of the patented process as described in one or more claims of the '160 patent. The Accused Instrumentalities have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe one or more claims of the '160 patent, including, for example, claim 1 of the '160 patent. The special features include, for example, the method recited in claim 1, including all the intermediary steps, that allow the claimed method of monitoring user usage patterns of a system. The special features constitute a material part of the invention of one or more of the claims of the '160 patent and are not staple articles of commerce suitable for substantial non-infringing use. Defendant's contributory infringement is ongoing.

70. Defendant has had knowledge of the '160 patent at least as of the date when it was notified of the filing of this action.

71. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

72. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

73. Since at least as early as August 23, 2022, Defendant's direct and indirect infringement of the '160 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

74. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '160 patent.



75. Plaintiff has been damaged and continues to be damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

76. Alto Dynamics has suffered and continues to suffer irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. Alto Dynamics has and will continue to suffer this harm by virtue of each Defendant's infringement of the '160 patent. Defendant's actions have interfered with and will interfere with Alto Dynamics' ability to license technology. The balance of hardships favors Alto Dynamics' ability to commercialize its own ideas and technology. The public interest in allowing Alto Dynamics to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

#### **COUNT V: INFRINGEMENT OF U.S. PATENT NO. 7,152,018**

77. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

78. The USPTO duly issued U.S. Patent No. 7,152,018 (the "'018 patent") on December 19, 2006, after full and fair examination of Application No. 10/499,578, which was filed on December 18, 2002. *See Ex. E*, at E-1. A certificate of correction was issued on December 19, 2006. *Id.*, at E-11-12.

79. The '018 patent is entitled "System And Method For Monitoring Usage Patterns." *See id.*

80. Alto Dynamics owns all substantial rights, interest, and title in and to the '018 patent, including the sole and exclusive right to prosecute this action and enforce the '018 patent against infringers, and to collect damages for all relevant times.

81. The claims of the '018 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods for monitoring, recording and analysis of user activity.

82. The written description of the '018 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '018 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

83. Defendant has infringed and continue to infringe one or more claims of the '018 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including, but not limited to, Defendant's employ of cookies for its online sales platform.

84. Defendant has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '018 patent.

85. For example, the Accused Instrumentalities track user activities and preferences (*e.g.*, using cookies), including by performing, and allowing users to perform a method of monitoring user usage patterns of a system, comprising the steps of providing at least one state object, the object including a profile representative of user usage, storing the state object at a client location, passing, to a central server, the state object with each subsequent interaction initiation, and receiving, from the central server, the state object along with the response of the central server,

wherein the profile is modified, to reflect the interaction between the client location and the central server, by one of one or more scripts within or included in information/resources provided to the client location by the central server, and one or more programs executed at the client location, thus precluding manipulation of the profile by the server.

86. Since at least as early as August 23, 2022, Defendant has also indirectly infringed and continues to indirectly infringe the '018 patent by inducing others to directly infringe the '018 patent. Defendant has induced and continue to induce their subsidiaries, partners, affiliates, and end-users, including Defendant's customers and potential customers, to directly infringe, either literally or under the doctrine of equivalents, the '018 patent by using the Accused Instrumentalities. Defendant took active steps, directly or through contractual relationships with others, with the specific intent to cause them to use the Accused Instrumentalities in a manner that infringes one or more claims of the '018 patent, including, for example, claim 1 of the '018 patent. Such steps by Defendant included, among other things, advising or directing personnel, contractors, or end-users to make or use the Accused Instrumentalities in an infringing manner; advertising and promoting the use of the Accused Instrumentalities in an infringing manner; or distributing instructions that guide users to use the Accused Instrumentalities in an infringing manner. Defendant is performing these steps, which constitutes induced infringement with the knowledge of the '018 patent and with the knowledge that the induced acts constitute infringement. Defendant is aware that the normal and customary use of the Accused Instrumentalities by others would infringe the '018 patent. Defendant's inducement is ongoing.

87. Since at least as early as August 23, 2022, Defendant has also indirectly infringed and continues to indirectly infringe by contributing to the infringement of the '018 patent. Defendant has contributed and continues to contribute to the direct infringement of the '018 patent by

personnel, contractors, customers, and other end users by encouraging them to use the Accused Instrumentalities to perform the steps of the patented process as described in one or more claims of the '018 patent. The Accused Instrumentalities have special features that are specially designed to be used in an infringing way and that have no substantial uses other than ones that infringe one or more claims of the '018 patent, including, for example, claim 1 of the '018 patent. The special features include, for example, the method recited in claim 1, including all the intermediary steps, that allow the claimed method of monitoring user usage patterns of a system. The special features constitute a material part of the invention of one or more of the claims of the '018 patent and are not staple articles of commerce suitable for substantial non-infringing use. Defendant's contributory infringement is ongoing.

88. Defendant has had knowledge of the '018 patent at least as of the date when it was notified of the filing of this action.

89. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

90. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

91. Since at least as early as August 23, 2022, Defendant's direct and indirect infringement of the '018 patent is, has been, and continues to be willful, intentional, deliberate, or in conscious disregard of Plaintiff's rights under the patent.

92. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '018 patent.

93. Plaintiff has been damaged and continues to be damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

94. Alto Dynamics has suffered and continues to suffer irreparable harm, through its loss of market share and goodwill, for which there is no adequate remedy at law. Alto Dynamics has and will continue to suffer this harm by virtue of each Defendant's infringement of the '018 patent. Defendant's actions have interfered with and will interfere with Alto Dynamics' ability to license technology. The balance of hardships favors Alto Dynamics' ability to commercialize its own ideas and technology. The public interest in allowing Alto Dynamics to enforce its right to exclude outweighs other public interests, which supports injunctive relief in this case.

#### **COUNT VI: INFRINGEMENT OF U.S. PATENT NO. 6,604,100**

95. Alto Dynamics repeats and re-alleges the allegations in Paragraphs above as though fully set forth in their entirety.

96. The United States Patent and Trademark Office ("USPTO") duly issued U.S. Patent No. 6,604,100 (the "'100 patent") on August 5, 2003, after full and fair examination of Application No. 09,778,749, which was filed on February 8, 2001. *See Ex. F*, at F-1. A Certificate of Correction was issued on November 25, 2003. *See id.*, at F-18.

97. The '100 patent is entitled "Method for converting relational data into a structured document."

98. Alto Dynamics owns all substantial rights, interest, and title in and to the '100 patent, including the sole and exclusive right to prosecute this action and enforce the '100 patent against infringers, and to collect damages for all relevant times.

99. The claims of the '100 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operations for viewing and querying relational data.

100. The written description of the '100 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art priority date. The '100 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

101. Defendant has infringed one or more claims of the '100 patent by using, providing, supplying, or distributing the Accused Instrumentalities.

102. Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '100 patent.

103. For example, the Accused Instrumentalities employ database searching and viewing capabilities, including by performing, and allowing users to perform, a method for converting relational data from a relational database into a structured document, comprising the steps of storing a view query that defines a structured document view of the relational database, a structure of the view query being independent of a structure of data in the relational database; receiving a user query against the structured document view; forming an executable query by determining a composition of the view query and the user query; partitioning the executable query into a data extraction portion and a construction portion; transmitting the data extraction portion to the

relational database; receiving at least one tuple stream from the relational database according to the data extraction portion; and merging the at least one tuple stream and the construction portion to generate a structured document, wherein the structured document view is capable of defining a document of arbitrary nesting depth.

104. On information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights).

105. Defendant's actions were at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

106. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '100 patent.

107. Plaintiff has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **COUNT VII: INFRINGEMENT OF U.S. PATENT NO. 6,691,103**

108. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

109. The United States Patent and Trademark Office ("USPTO") duly issued U.S. Patent No. 6,691,103 (the "'103 patent") on February 10, 2004, after full and fair examination of Application No. 10/114,423, which was filed on April 2, 2002. *See Ex. G*, at G-1.

110. The '103 patent is entitled "Method For Searching A Database, Search Engine System For Searching A Database, And Method Of Providing A Key Table For Use By A Search Engine For A Database." *See id.*

111. Alto Dynamics owns all substantial rights, interest, and title in and to the '103 patent, including the sole and exclusive right to prosecute this action and enforce the '103 patent against infringers, and to collect damages for all relevant times.

112. The claims of the '103 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods of database searching techniques and systems.

113. The written description of the '103 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '103 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

114. Defendant has infringed the '103 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including but not limited to, by providing internal company analytics to its employees and staff.

115. Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '103 patent.



116. For example, the Accused Instrumentalities, perform, and allow users to perform, a method for searching a database including a plurality of records, at least some of said records having a plurality of record fields and a plurality of record elements, comprising the steps of receiving a search criteria including a plurality of search elements corresponding to at least some of the record elements of said database, each of said search elements being capable of returning one or more corresponding search results from the records of said database; ordering the search elements of said search criteria based upon an expected size of the corresponding search results from said database; and searching said database with one of said search elements, which is expected to provide a first group of said search results, before searching said database with another one of said search elements, which is expected to provide a second group of said search results, said second group being larger in size than said first group.

117. On information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights).

118. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

119. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '103 patent.

120. Alto Dynamics has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**COUNT VIII: INFRINGEMENT OF U.S. PATENT NO. 6,662,190**

121. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

122. The United States Patent and Trademark Office (“USPTO”) duly issued U.S. Patent No. 6,662,190 (the “’190 patent”) on December 9, 2003, after full and fair examination of Application No. 09/812,425, which was filed on March 20, 2001. *See Ex. H*, at H-1.

123. The ’190 patent is entitled “Learning Automatic Data Extraction System.” *See id.*

124. Alto Dynamics owns all substantial rights, interest, and title in and to the ’190 patent, including the sole and exclusive right to prosecute this action and enforce the ’190 patent against infringers, and to collect damages for all relevant times.

125. The claims of the ’190 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods of database searching techniques and systems.

126. The written description of the ’190 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The ’190 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

127. Defendant has infringed one or more claims of the ’190 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities,

including, but not limited to, processing the resumes uploaded to its online sales platform and that platform's provision of a browse history to its users, along with the ability to re-select items.

128. Defendant has directly infringed, either literally or under the doctrine of equivalents, at least claim 1 of the '190 patent.

129. For example, the Accused Instrumentalities employ text mining capabilities, including by performing, and allowing users to perform, through its resume uploading feature(s), a method for data extraction of a text file to a record file, said method comprising the steps of identifying an area of interest in a text file, parsing said area of interest in order to identify a list of values of attributes in said area of interest, recognizing a first set of values in said list that match values contained in an attribute value vocabulary, forming a record using said first set of values, gleaning a second set of values in said list that do not match values contained in said attribute value vocabulary, and adding said second set of values to said record.

130. On information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights).

131. Defendant's actions were at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

132. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '190 patent.

133. Alto Dynamics has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for

such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

**COUNT IX: INFRINGEMENT OF U.S. PATENT NO. 6,757,662**

134. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

135. The USPTO duly issued U.S. Patent No. 6,757,662 (the “’662 patent”) on June 29, 2004, after full and fair examination of Application No. 09/641,972, which was filed on August 21, 2000. *See Ex. I*, at I-1.

136. The ’662 patent is entitled “Method And System For Display Advertisement Qualification And Notification.” *See id.*

137. Alto Dynamics owns all substantial rights, interest, and title in and to the ’662 patent, including the sole and exclusive right to prosecute this action and enforce the ’662 patent against infringers, and to collect damages for all relevant times.

138. The claims of the ’662 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods for advertising to online users that take into consideration specialized user characteristics.

139. The written description of the ’662 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The ’662 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

140. Defendant has infringed the '662 patent by making, using, providing, supplying, selling, offering for sale, or distributing the Accused Instrumentalities, including, but not limited to, its Houzz platform, which displays customized advertisements and electronic product placement.

141. Defendant has directly infringed and continue to directly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '662 patent.

142. For example, the Accused Instrumentalities perform, and allow users to perform, a method for providing an advertisement for display on a computer system, comprising the steps of storing at least one of a plurality of part identifications, wherein each part identification is a character string identified with at least one particular product, storing contact information for at least one seller selling the at least one particular product, storing advertising information for the at least one seller wishing to advertise the at least one particular product, receiving the at least one of a plurality of part identifications from a user request, triggering at least one triggered advertisement related to the at least one particular product to be immediately displayed if the user is associated with a pre-determined desired group corresponding to the triggered advertisement, and the user is not associated with a pre-determined no-show group corresponding to the triggered advertisement, wherein the at least one triggered advertisement is triggered by comparing the at least one of a plurality of part identifications with stored sellers wishing to advertise particular products identified by the at least one of a plurality of part identifications, triggering a communication relating information about the user to at least one seller, wherein the communication is triggered by comparing the least one of a plurality of part identifications with stored sellers wishing to sell particular products identified by the at least one of a plurality of part identifications.

143. On information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights).

144. Defendant's actions were at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

145. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '662 patent.

146. Plaintiff has been damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringement, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

#### **COUNT XI: INFRINGEMENT OF U.S. PATENT NO. 6,311,194**

147. Alto Dynamics repeats and re-alleges the allegations in the Paragraphs above as though fully set forth in their entirety.

148. The USPTO duly issued U.S. Patent No. 6,311,194 (the "'194 patent") on October 30, 2001, after full and fair examination of Application No. 09/645,301, which was filed on August 21, 2000. *See Ex. J*, at J-1. The '194 patent gains priority from U.S. Provisional Application No. 60/189,528, which is incorporated by reference. *Id.*

149. The '194 patent is entitled "System And Method For Creating A Semantic Web And Its Applications In Browsing, Searching, Profiling, Personalization And Advertising." *See id.*

150. Alto Dynamics owns all substantial rights, interest, and title in and to the '194 patent, including the sole and exclusive right to prosecute this action and enforce the '194 patent against infringers, and to collect damages for all relevant times.

151. The claims of the '194 patent are not directed to an abstract idea and are not limited to well-understood, routine, or conventional activity. Rather, the claimed inventions include inventive components that improve upon the function and operation of preexisting systems and methods of database searching techniques and systems.

152. The written description of the '194 patent describes in technical detail each limitation of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patently distinct from and improved upon what may have been considered conventional or generic in the art at the priority date. The '194 patent also identifies and circumscribes all information necessary for a skilled artisan to perform each limitation in the claims in light of that which was known in the art at the priority date.

153. Defendant has infringed the '194 patent by using, providing, supplying, or distributing the Accused Instrumentalities.

154. Defendant has directly infringed and continues to indirectly infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '194 patent.

155. For example, the Accused Instrumentalities perform, and allow users to perform, a method for generating metadata associated with a data set residing on a storage system that comprises the steps of: (a) receiving a classifier associated with a data set; (b) retrieving WorldModel-based extraction information (as defined in 60/189,528), including at least one attribute identifier correlated with pattern information associated with the received classifier; (c) extracting metadata associated with the data set based upon the retrieved extraction information; and (d) storing in a data store the extracted metadata which is correlated with an identifier corresponding to the data set.

156. Furthermore, on information and belief, Defendant has a policy or practice of not reviewing the patents of others (including instructing its employees to not review the patents of others), and thus has been willfully blind of Plaintiff's patent rights.

157. Defendant's actions are at least objectively reckless as to the risk of infringing a valid patent and this objective risk was either known or should have been known by Defendant.

158. Alto Dynamics or its predecessors-in-interest have satisfied all statutory obligations required to collect pre-filing damages for the full period allowed by law for infringement of the '194 patent.

159. Plaintiff has been damaged and continues to be damaged as a result of the infringing conduct by Defendant alleged above. Thus, Defendant is liable to Alto Dynamics in an amount that compensates it for such infringements, which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

### **JURY DEMAND**

160. Plaintiff hereby requests a trial by jury on all issues so triable by right.

### **PRAYER FOR RELIEF**

161. WHEREFORE, Alto Dynamics requests that the Court find in its favor and against Defendant, and that the Court grant Alto Dynamics the following relief:

- a. Judgment that one or more claims of the Asserted Patents has been infringed, either literally or under the doctrine of equivalents, by Defendant or all others acting in concert therewith;
- b. A permanent injunction enjoining Defendant and its officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in concert therewith from infringement of the '160 patent, the '513 patent, and



the '018 patent; or, in the alternative, an award of a reasonable ongoing royalty for future infringement of the '160 patent, the '513 patent, and the '018 patent by such entities;

- c. Judgment that Defendant account for and pay to Alto Dynamics all damages to and costs incurred by Alto Dynamics because of Defendant's infringing activities and other conduct complained of herein;
- d. Judgment that Defendant's infringement of the '160 patent, the '513 patent, and the '018 patent be found willful, and that the Court award treble damages for the period of such willful infringement pursuant to 35 U.S.C. § 284;
- e. Pre-judgment and post-judgment interest on the damages caused by Defendant's infringing activities and other conduct complained of herein;
- f. That this Court declare this an exceptional case and award Alto Dynamics its reasonable attorneys' fees and costs in accordance with 35 U.S.C. § 285; and
- g. All other and further relief as the Court may deem just and proper under the circumstances.

Dated: October 12, 2022

Respectfully submitted,

**STAMOULIS & WEINBLATT, LLC**

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**List Of Exhibits**

- A. US Patent No. 8,051,098
- B. US Patent No. RE46,513
- C. US Patent No. 7,657,531
- D. US Patent No. 7,392,160
- E. US Patent No. 7,152,018
- F. US Patent No. 6,604,100
- G. US Patent No. 6,691,103
- H. US Patent No. 6,662,190
- I. US Patent No. 6,757,662
- J. US Patent No. 6,311,194
- K. Houzz – Login
- L. Houzz – Privacy Policy
- M. Houzz – Search Experience